Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton Division Director 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

November 16, 2000

Johnny Pappas, Sr. Environmental Engineer Plateau Mining Corporation 847 Northwest Highway 191 Helper, Utah 84526

Re:

Conditional Approval of Slope Stability Report and Coal Waste Delineation for Pond 001A, Plateau Mining Corporation, Willow Creek Mine, Caste AM00A2, October 1988

Dear Mr. Pappas:

The above-referenced amendment is conditionally approved upon receipt of five clean copies prepared for incorporation in the Mining and Reclamation Plan. Once we receive these copies, we will send you a stamped approved copy to incorporate into your Mining and Reclamation Plan.

A copy of our technical analysis is enclosed for your information. If you have any questions, please feel free to call Pete Hess at (435) 613-5622, or me at (801) 538-5258.

Sincerely,

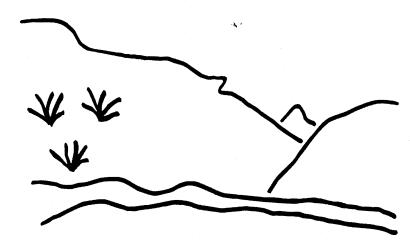
Daron R. Haddock Permit Supervisor

sd/sm

cc: Price Field Office

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## State of Utah



# Utah Oil Gas and Mining

Coal Regulatory Program

Willow Creek Mine
Slope Stability/Coal Waste Delineation for Pond 001A
C007038-AM00A-2
Technical Analysis
November 9, 2000

### **INTRODUCTION**

During the design verification of pond 001A at the Willow Creek Mine (design drawings vs. "asbuilt" field conditions), the permittee learned that the installed primary spillway had several problems. During the excavation of this spillway to begin the correction of these problems, Plateau Mining Corporation (PMC) discovered that coal mine waste (coal fines) had been placed in the embankment where the primary spillway was located; further examination of the general area showed that these fines extended under the emergency spillway as well.

Upon the removal of these fines from the primary and emergency spillway locations and the replacement of the voids with clean fill material, PMC decided, following notification to the Division, and with approval from same to further investigate the impounding embankment relative to additional coal fines. This was done by digging fourteen test pits on February 2, 2000. An engineering analysis of the situation was conducted by EarthFax Engineering, through contract with the permittee.

The R645 coal rules allow for the use of coal waste material in the construction of impounding structures, provided the requirements of those rules are met. The Division completed the initial review of the permittee's attempt to meet the requirements of the R645 rules on May 3, 2000, and responded to the applicant on May 9, 2000.

It was determined within the May 3, 2000 review that one deficiency which related to the final disposition of the buried waste within the pond 001A embankment existed. The reclamation plan for this pond, as it currently exists within the C007038 mining and reclamation plan, indicates that the pond 001A embankment will be lowered approximately ten feet in order to achieve the final reclamation contour. This will expose at least some of the coal mine waste material, which indicates that the reclamation plan for the pond is in need of revision.

The permittee is well aware that the reclamation plan for pond 001A is in need of revision, as well as the reclamation plan for the entire site. The Division requested that the permittee respond to the initial deficiency review by October 5, 2000. As a result of the determination that the reclamation plan needed revision, and following discussion with Division personnel, it was determined that the permittee should respond to the initial deficiency response by October 31, 2000. This response was received by the UDNR/OGM/PFO on October 31, 2000.

The following technical analysis is a review of the permittee's attempt to address the single deficiency aired in the May 3, 2000 deficiency document.

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INTRODUCTION

#### **RECLAMATION PLAN**

#### **GENERAL REQUIREMENTS**

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-323, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-725, -301-726, -301-726, -301-729, -301-731, -301-732, -301-733, -301-733, -301-746, -301-764, -301-830.

#### Analysis:

R645-301-542.730. Disposal of Coal Mine Waste in a Controlled Manner to Meet Reclamation and Revegetation Standards/Approved Post Mining Land Use.

Pond 001 will remain in place at the Willow Creek site to act as the primary means of sediment control from the reclaimed mine facilities area at least through Phase I. When the permittee receives authorization from the UDNR/OGM to remove pond 001 (following a determination that successful vegetation and effluent standards can be met) the question of the permanent disposal of the coal mine waste in the pond 001 embankment will arise. Although Waste Handling is discussed in Volume 1, Section 4.5 Engineering Design, page 4.5-22, the permittee had failed to commit to a final disposition of the coal mine waste in the pond 001 embankment. A conflict was determined to exist in the existing/approved reclamation pond for pond 001A, based on a review of the pond 001A reclamation plan cross-sections (see Map 22, Mine Surface Facilities Area, Pre-mining/Post-mining Cross-Sections, Cross Section E-E'). That drawing indicated that the embankment which contains the coal waste material would be lowered approximately ten feet to achieve the final reclamation surface contour. This in turn would expose at least some of the coal waste material to weathering, and inhibit revegetation of the embankment.

The applicants October 23, 2000 deficiency response consists of a redline revision of page 5.4-11, and addresses the final disposition of the coal mine waste buried within the pond 001A embankment. Although the permittee has stated that the revision of the reclamation pond is pending, the disposition of the coal mine waste as it currently exists is that the material is buried under at least three feet of incombustible material. The revised page 5.4-11 also indicates that "upon reclamation of pond 001A, additional soil will be placed" on the coal mine waste, further reducing the probability that this material can be eventually exposed to weathering. In turn, a reduction in the probability for the potential to create acid and/or toxic forming byproducts also exists.

Page 5.4-11, paragraph 2 also indicates that Section 5.4.2.2 discusses the elimination of potential hazards, in that the analysis of samples of existing coal refuse from the Mine's permit area concludes that there are no significant toxicity concerns relative to these materials. This coincides with the findings made relative to R645-301-746.120 as well as the findings under R645-301-746.310 found on Page 12 of the Division's May 3, 2000 deficiency document.

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#### **RECLAMATION PLAN**

#### Findings:

The permittee's October 23, 2000 deficiency response has committed to leave the buried coal mine waste in the pond 001A embankment in place, and place additional soil on top to further bury same. This adequately addresses the requirements relative to the final disposition of that coal mine waste thereby meeting the requirements of R645-301-542.730.

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